

INFORMATION DISCLOSURE CITATION PTO-1449	Atty. Docket No.	Serial No.
	NMTI 1002-4	09/972,428-3974
	Applicant	
	PIERRAT, Christophe	
	Filing Date	Group
	10/5/2001	<u>2824</u>
		Not Yet Assigned

U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
<u>JSR</u>	4,037,918	7/26/1977	Kato	350	3.5	7/31/1975
	4,456,371	6/26/1984	Lin	355	71	6/30/1982
	5,302,477	4/12/1994	Dao, et al.	430	5	8/21/1992
	5,308,741	5/3/1994	Kemp	430	312	7/31/1992
	5,316,878	5/31/1994	Saito, et al.	430	5	6/4/1992
	5,324,600	6/28/1994	Jinbo, et al.	430	5	7/7/1992
	5,328,807	7/12/1994	Tanaka, et al.	430	311	6/7/1991
	5,334,542	8/2/1994	Saito, et al.	437	40	11/18/1992
	5,352,550	10/4/1994	Okamoto	430	5	4/23/1993
	5,364,716	11/15/1994	Nakagawa, et al.	430	5	9/3/1992
	5,424,154	6/13/1995	Borodovsky	430	5	12/10/1993
	5,480,746	1/2/1996	Jinbo, et al.	430	5	5/16/1994
	5,496,666	3/5/1996	Chu, et al.	430	5	10/27/1994
	5,498,579	3/12/1996	Borodovsky, et al.	437	250	6/8/1994
	5,503,951	4/2/1996	Flanders, et al.	430	5	4/17/1995
	5,523,186	6/4/1996	Lin, et al.	430	5	12/16/1994
	5,527,645	6/18/1996	Pati, et al.	430	5	11/17/1994
	5,532,090	7/2/1996	Borodovsky	430	5	3/1/1995
	5,537,648	7/16/1996	Liebmann, et al.	395	500	8/15/1994
	5,538,815	7/23/1996	Oi, et al.	430	5	9/14/1993
	5,539,568	7/23/1996	Lin, et al.	359	285	6/7/1995
	5,565,286	10/15/1996	Lin	430	5	11/17/1994
<u>JSR</u>	5,573,890	11/12/1996	Spence	430	311	7/18/1994

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JSR	5,595,843	1/21/1997	Dao	430	5	3/30/1995
	5,620,816	4/15/1997	Dao	430	5	10/13/1995
	5,635,316	6/3/1997	Dao	430	5	10/13/1995
	5,636,131	6/3/1997	Liebmann, et al.	364	490	5/12/1995
	5,702,848	12/30/1997	Spence	430	5	8/23/1996
	5,725,969	3/10/1998	Lee	430	5	12/22/1995
	5,761,075	6/2/1998	Oi, et al.	364	488	5/31/1996
	5,766,804	6/16/1998	Spence	430	5	8/23/1996
	5,766,806	6/16/1998	Spence	430	5	9/9/1996
	5,807,649	9/15/1998	Liebmann, et al.	430	5	10/31/1996
	5,827,623	10/27/1998	Ishida, et al.	430	5	10/30/1996
	5,858,580	1/12/1999	Wang, et al.	430	5	9/17/1997
	5,885,734	3/23/1999	Pierrat, et al.	430	5	8/15/1996
	5,923,566	6/13/1999	Galan, et al.	364	489	3/25/1997
	5,994,002	11/30/1999	Matsuoka	430	5	9/4/1997
	5,998,068	12/7/1999	Matsuoka	430	5	1/27/1998
	6,004,702	12/21/1999	Lin	430	5	5/21/1998
	6,010,807	1/4/2000	Lin	430	5	4/7/1998
	6,057,063	5/2/2000	Liebmann, et al.	430	5	4/14/1997
	6,066,180	5/23/2000	Kim, et al.	716	19	3/15/1999
	6,077,630	6/20/2000	Pierrat	430	5	1/8/1998
	6,083,275	7/4/2000	Heng, et al.	716	19	1/9/1998
JSR	6,228,539 B1	5/8/2001	Wang, et al.	430	5	1/12/1999

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U.S. PATENT DOCUMENTS						
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
JSL	6,251,549 B1	6/26/2001	Levenson	430	11	10/28/1999
JSL	6,258,493 B1	7/10/2001	Wang, et al.	430	5	7/17/2000

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FOREIGN PATENT DOCUMENTS							
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JSR	Ackmann, P., et al., "Phase Shifting and Optical Proximity Corrections to Improve CD Control on Logic Devices in Manufacturing for Sub 0.35 um I-Line", Advance Micro Devices (8 pages).		
	Matsuoka, K., et al., "Application of Alternating Phase-Shifting Mask to 0.16um CMOS Logic Gate Patterns", Matsushita Electric Ind. Co., Ltd. (9 pages).		
	Spence, C., et al., "Detection of 60(degree) Phase Defects on Alternating PSMs", Advanced Micro Devices, KLA-Tencor, DuPont RTC (2 pages).		
	Sugawara, M., et al., "Defect Printability Study of Attenuated Phase-Shifting Masks for Specifying Inspection Sensitivity", Sony Corporation, Kanagawa, Japan (16 pages).		
	Schmidt, R., et al., "Impact of Coma on CD Control for Multiphase PSM Designs", AMD, ASML (11 pages).		
	Erdmann, A., "Topography Effects and Wave Aberrations in Advanced PSM-Technology", Fraunhofer Institute of Integrated Circuits (11 pages).		
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	Hanyu, et al., "New Phase-Shifting Mask with Highly Transparent SiO2 Phase Shifters", Fujitsu Laboratories Ltd. (11 pages).		
	Ishiwata, N., et al., "Fabrication of Phase-Shifting Mask", Fujitsu Limited (11 pages).		
	Levenson, M., et al., "Phase Phirst! An Improved Strong-PSM Paradigm", M.D. Levenson Consulting, Petersen Advanced Lithography, KLA-Tencor (10 pages).		
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	Lin, B.J., "The Relative Importance of the Building Blocks for 193nm Optical Lithography", Linnovation, Inc. (12 pages).		
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JSR	Morikawa, Y., et al., "100nm-alt.PSM Structure Discussion for ArF Lithography", Dai-Nippon Printing Co., Ltd. (15 pages).		

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JSR	Rhyins, P., et al., "Characterization of Quartz Etched PSM Masks for KrF Lithography at the 100nm Node", Photonics, Inc., MIT Lincoln Lab, ARCH Chemicals, Finle Technologies, KLA Tencor Corp. (10 pages).	
JSR	Ronse, K., et al., "Thin Film Interference Effects in Phase Shifting Masks Causing Phase and Transmittance Errors", IMEC (15 pages).	
JSR	Rosenbluth, A., et al., "Optimum Mask and Source Patterns to Print a Given Shape", IBM (17 pages).	
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	Suzuki, A., et al., "Multilevel Imaging System Realizing k1=0.3 Lithography", Canon Inc. (13 pages).	
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JSR	Toublan, O., et al., "Phase and Transmission Errors Aware OPC Solution for PSM: Feasibility Demonstration", Mentor Graphics Corp. (7 pages).	

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EXAMINER'S INITIALS	CITATION		
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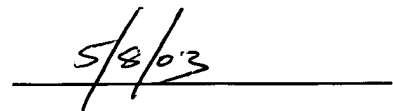
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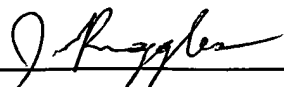
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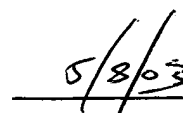
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INFORMATION DISCLOSURE CITATION PTO-1449		Atty. Docket No. NMTI 1002-4	Serial No. 09/972,428-3974
		Applicant PIERRAT, Christophe	Group 2824
		Filing Date 10/5/2001	Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
EXAMINER'S INITIALS	CITATION		
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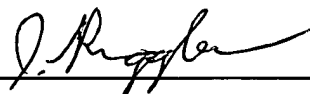
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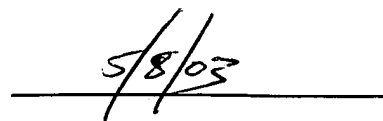
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	Applicant PIERRAT, Christophe	
	Filing Date 10/5/2001	Group <u>2824</u> Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
EXAMINER'S INITIALS	CITATION	
<u>JSR</u>	Pierrat, C., "Investigation of Proximity Effects in Alternating Aperture Phase Shifting Masks", Numerical Technologies, Inc. (11 pages).	
<u> </u>	Cote, M., et al., "A Practical Application of Full-Feature Alternating Phase-Shifting Technology for a Phase-Aware Standard-Cell Design Flow", Numerical Technologies Inc. (6 pages).	
<u> </u>	Heng, F., et al., "Application of Automated Design Migration to Alternating Phase Shift Mask Design", IBM Research Report RC 21978 (98769), February 26, 2001 (7 pages).	
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			Applicant PIERRAT, Christophe		Group 2824	
			Filing Date 10/5/2001			
U.S. PATENT DOCUMENTS						
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
JSA	5,472,814	12/5/1995	Lin	430	5	11/17/1994
	5,923,562	7/13/1999	Liebmann, et al.	364	488	10/18/1996
	6,130,012	10/10/2000	May, et al.	430	5	1/13/1999
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	6,335,128 B1	1/1/2002	Cobb, et al.	430	5	9/28/1999
	6,338,922 B1	1/15/2002	Liebmann, et al.	430	5	5/8/2000
	2001/0000240 A1	4/12/2001	Wang, et al.	430	5	12/7/2000
JSA	2001/0028985 A1	10/11/2001	Wang, et al.	430	5	4/20/2001

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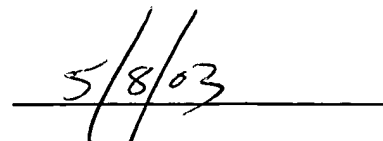
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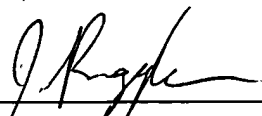
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	NMTI 1002-4	09/972,428-3974
	Applicant	
	PIERRAT, Christophe	
	Filing Date	Group
	10/5/2001	2824

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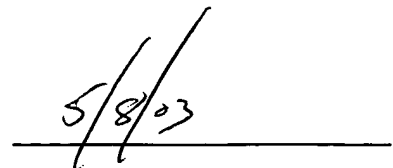
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JSR	WO 98/12605 A1	3/26/1998	WO			<input type="checkbox"/>	<input type="checkbox"/>

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		Applicant PIERRAT, Christophe	Group 2824	
		Filing Date 10/5/2001		
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)				
EXAMINER'S INITIALS	CITATION			
TSR	Polarized			
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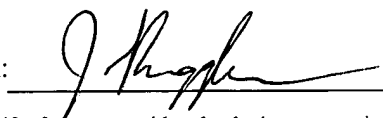
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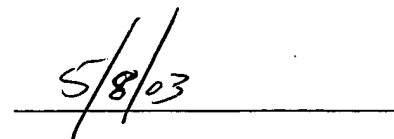
INFORMATION DISCLOSURE CITATION PTO-1449	Atty. Docket No. NMTI 1002-4 Applicant PIERRAT, Christophe Filing Date 10/5/2001 Serial No. 09/972,428-3974 Group 2824
	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
EXAMINER'S INITIALS	CITATION
JSR	Moriwa, A., et al., "Heuristic Method for Phase-Conflict Minimization in Automatic Phase-Shift Mask Design", Jpn. J. Appl. Phys., Vol. 34, Pt. 1, No. 12B, pp. 6584-6589, December 1995.
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INFORMATION DISCLOSURE CITATION PTO-1449			Atty. Docket No. NMTI 1002-4		Serial No. 09/972,428	
			Applicant PIERRAT, Christophe		Group 2824	
			Filing Date 10/5/2001			
U.S. PATENT DOCUMENTS						
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JSR	6,420,074 B2	7/16/2002	Wang et al.	430	5	12/7/2000
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	2002/0127479 A1	9/12/2002	Pierrat	430	5	2/6/2002
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JSR	2002/0155363 A1	10/24/2002	Cote, et al.	430	5	6/7/2002

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INFORMATION DISCLOSURE CITATION PTO-1449			Atty. Docket No. NMTI 1002-4		Serial No. 09/972,428	
			Applicant PIERRAT, Christophe		Group 2824	
			Filing Date 10/5/2001			
FOREIGN PATENT DOCUMENTS						
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J. Rygle

Date Considered:

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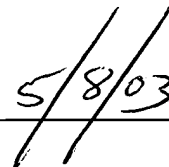
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		Applicant PIERRAT, Christophe	Group 2824
		Filing Date 10/5/2001	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
EXAMINER'S INITIALS	CITATION		
JSR	Cooke, M., "OPC/PSM Designs For Poly Gate Layers", European Semiconductor, Vol. 22, No. 7, pp. 57-59, July 2000.		
I	Granik, Y., et al., "Sub-Resolution Process Windows And Yield Estimation Technique Based On Detailed Full-Chip CD Simulation", SPIE, Vol. 4182, pp. 335-341 (2000).		
I	Plat, M., et al., "The Impact of Optical Enhancement Techniques on the Mask Error Enhancement Function (MEEF)", SPIE, Vol. 4000, pp. 206-214, March 1-3, 2000.		
JSR	Mansuripur, M., et al., "Projection Photolithography", Optics & Photonics News 11, 17 pages, February 2000.		

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